[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 4645 1/18/2001]

[Docket No. 2000-CE-57-AD; Amendment 39-12073; AD 2001-01-03]

RIN 2120-AA64

Airworthiness Directives; British Aerospace HP137 Mk1, Jetstream Series 200, and Jetstream Models 3101 and 3201 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to all British Aerospace HP137 Mk1, Jetstream series 200, and Jetstream Models 3101 and 3201 airplanes. This AD requires you to remove the nose landing gear steering actuator and install one that incorporates a modified piston rod. This AD is the result of mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for the United Kingdom. The actions specified by this AD are intended to prevent failure of the nose landing gear steering actuator because of problems with the current design piston rod. Continued operation with the current design piston rod could result in loss of nose wheel steering and possible loss of control of the airplane during takeoff, landing, and taxi operations.

DATES: This AD becomes effective on February 24, 2001.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of February 24, 2001.

ADDRESSES: You may get the service information referenced in this AD from British Aerospace Regional Aircraft, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland; telephone: (01292) 479888; facsimile: (01292) 479703. You may examine this information at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-CE-57-AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mr. Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; facsimile: (816) 329-4090.

SUPPLEMENTARY INFORMATION:

Discussion

What events have caused this AD? The Civil Aviation Authority (CAA), which is the airworthiness authority for the United Kingdom, recently notified FAA that an unsafe condition may exist on all British Aerospace HP137 Mk1, Jetstream series 200, and Jetstream Models 3101 and 3201 airplanes. The CAA reports three occurrences of nose landing gear failure in the area of the undercut on the base of the eye and thread on the steering actuator. The CAA reports cracks in this area on 10 additional nose landing gear units.

Investigation of these occurrences reveals incorrect installation or insufficient lubrication at the steering actuator trunnions. This then causes bending loads in the steering actuator piston rod during operation. What are the consequences if the condition is not corrected? Cracks in or failure of the steering actuator piston rod could result in loss of nose wheel steering and possible loss of control of the airplane during takeoff, landing, and taxi operations.

Has FAA taken any action to this point? We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to all British Aerospace HP137 Mk1, Jetstream series 200, and Jetstream Models 3101 and 3201 airplanes. This proposal was published in the *Federal Register* as a notice of proposed rulemaking (NPRM) on October 24, 2000 (65 FR 63551). The NPRM proposed to require you to remove the nose landing gear steering actuator and install one that incorporates a modified piston rod.

Was the public invited to comment? Interested persons were afforded an opportunity to participate in the making of this amendment. We have given due consideration to the comments received.

Comment Disposition

What is the Commenters' Concern? Several commenters express concern over the compliance time that FAA established. In particular, the comments are:

- 200 hours time-in-service (TIS) is unrealistic for the installation because parts would not be available and many of the affected aircraft would be unjustly grounded; and
- since CAA and British Aerospace recommend 3,000 landings since

May 5, 2000, FAA should adopt a similar compliance time.

What is FAA's Response to the Concern? After consulting with British Aerospace and CAA, we concur that 200 hours TIS would unjustly ground many of the affected aircraft. We are changing the compliance time of the installation in this final rule as follows:

"Within the next 3,000 landings after May 5, 2000 (the issue date of the applicable service information) or within the next 90 days after the effective date of this AD, whichever occurs later."

The FAA's Determination

What is FAA's Final Determination on this Issue? After careful review of all available information related to the subject presented above, we have determined that air safety and the public interest require the adoption of the rule as proposed except for the compliance time change and minor editorial corrections. We determined that this compliance time change and the minor corrections:

- will not change the meaning of the AD; and
- will not add any additional burden upon the public than was already proposed.

Cost Impact

How many airplanes does this AD impact? We estimate that this AD affects 264 airplanes in the U.S. registry.

What is the cost impact of this AD on owners/operators of the affected airplanes? We estimate the following costs to accomplish the modification:

Labor Cost	Parts Cost	Total Cost Per Airplane	Total Cost on U.S. Airplane Operators
2 workhours X \$60	\$1,520 per	\$1,640 per	\$432,960.
per hour = $$120$.	airplane.	airplane.	

Regulatory Impact

Does this AD impact various entities? The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

Does this AD involve a significant rule or regulatory action? For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption "ADDRESSES".

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows: PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows: Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. FAA amends § 39.13 by adding a new AD to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service Washington, DC

U.S. Department of Transportation Federal Aviation Administration

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-01-03 BRITISH AEROSPACE: Amendment 39-12073; Docket No. 2000-CE-57-AD.

- (a) What airplanes are affected by this AD? This AD affects Models HP137 Mk1, Jetstream Series 200, and Jetstream Models 3101 and 3201 airplanes, all serial numbers, certificated in any category.
- (b) Who must comply with this AD? Anyone who wishes to operate any of the above airplanes must comply with this AD.
- (c) What problem does this AD address? The actions specified by this AD are intended to prevent failure of the nose landing gear steering actuator because of problems with the current design piston rod. Continued operation with the current design piston rod could result in loss of nose wheel steering and possible loss of control of the airplane during takeoff, landing, and taxi operations.
- (d) What actions must I accomplish to address this problem? To address this problem, you must accomplish the following:

Action	Compliance Time	Procedures
(1) Remove the nose landing gear steering actuator and install one that incorporates a modified piston rod.	Within the next 3,000 landings after May 5, 2000 (the issue date of the applicable service bulletin) or within the next 90 days after February 24, 2001 (the effective date of this AD), whichever occurs later, unless already accomplished. If the number of landings is unknown, you may use hours time-in-service (TIS) by multiplying the number of hours TIS by 0.75. In this case, 3,000 landings would be equal to 4,000 hours TIS (4,000 hours TIS X .75 = 3,000 landings).	In accordance with the procedures in APPH Ltd. Service Bulletin 32-73, dated April 2000, as referenced in British Aerospace Jetstream Mandatory Service Bulletin 32-JA000342, Issued: May 5, 2000.

Action	Compliance Time	Procedures
(2) You may not install, on any affected airplane, a nose landing gear unit that does not incorporate a modified steering actuator piston rod, as required by paragraph (d)(1) of this AD.	As of February 24, 2001 (the effective date of this AD).	Not Applicable.

- (e) <u>Can I comply with this AD in any other way?</u> You may use an alternative method of compliance or adjust the compliance time if:
 - (1) Your alternative method of compliance provides an equivalent level of safety; and
- (2) The Manager, Small Airplane Directorate, approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Small Airplane Directorate.
- Note 1: This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.
- (f) Where can I get information about any already-approved alternative methods of compliance? Contact Mr. Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; facsimile: (816) 329-4090.
- (g) What if I need to fly the airplane to another location to comply with this AD? The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.
- (h) Are any service bulletins incorporated into this AD by reference? Actions required by this AD must be done in accordance with APPH Ltd. Service Bulletin 32-73, dated April 2000, as referenced in British Aerospace Jetstream Mandatory Service Bulletin 32-JA000342, Issued: May 5, 2000. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You can get copies from British Aerospace Regional Aircraft, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland. You can look at copies at FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.
- (i) When does this amendment become effective? This amendment becomes effective on February 24, 2001.

Note 2: The subject of this AD is addressed in British AD 004-05-2000.

FOR FURTHER INFORMATION CONTACT: Mr. Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; facsimile: (816) 329-4090.

Issued in Kansas City, Missouri, on January 4, 2001. Michael Gallagher, Manager, Small Airplane Directorate, Aircraft Certification Service.